

## Resilience of Nursing During the Pandemic Covid-19

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**Abstract:** In carrying out their duties, nurses are at the forefront of handling, preventing and caring for Covid-19 patients. Several psychological health problems in nurses emerged as a response to maladaptive coping. This research was conducted to determine the resilience of nurses and the factors that influence it. This quantitative research used a cross-sectional design, carried out on nurses in the Jember Regency area from July-August 2020. The sampling technique used was incidental sampling with a total sample of 117 respondents. From the results of the analysis of the characteristics of respondents based on the place of work that affect the resilience of nurses. Meanwhile, the resilience of most nurses in Jember is at a sufficient level.

**Keywords:** psychological resistance; nurses; resilience

### INTRODUCTION

The Covid-19 pandemic that is currently happening has not only had an impact on the physical but also has a serious impact on psychological health. Various physical and psychological health issues have been published during the Covid-19 pandemic at both the individual and community levels. The health crisis during the covid-19 pandemic causes psychological changes in a person such as fear, anxiety and discomfort Cheng, et al [3]. This change is not only felt by the community but also by health workers, especially nurses.

The World Health Organization (WHO) predicts that Covid-19 is predicted to last a long time. Given the importance of maintaining health in this pandemic era, each individual is expected to be able to survive and adapt to new changes and routines during the Covid-19 pandemic, even in the new normal era. This condition is certainly a challenge for the community, including health workers, to adapt to changes during the Covid-19 pandemic. Individuals who are unable to adapt during the pandemic period will cause problems both individually and socially for Aldunce, et al [1].

Problems experienced by health workers during a pandemic often have an effect on changing roles in the family, community or workplace. These changes are perceived as a crisis condition, threatening and causing a lot of health, financial and social losses Stuart [11]. The mechanism for the emergence of psychological health problems in individuals in the pandemic era is related to the work of the autonomic nervous system and neurotransmitters, which appears to cause the release of epinephrine from the adrenals. Threats during the Covid-19 pandemic are perceived by the five senses, then passed to the cerebral cortex, then to the limbic system and the RAS (reticular activating system), then to the hypothalamus and pituitary. Then the adrenal glands secrete catecholamines and there is autonomic nerve stimulation.

Previous studies have suggested that the psychological health problems of a major disaster have a wider and longer lasting impact than physical injuries, whereas there is much less attention to psychological health, both in terms of procuring personnel for planning and resources Allsopp and Brewin [2], Barrett, Williams, Hind, Chitsabesan, and French [2]. The results of research by Fadli et al [5] regarding the psychological impact on health workers during the Covid-19 pandemic show that 60.8% of health workers experience anxiety to various levels and levels and 15.7% of health workers do not experience anxiety.

Crisis conditions due to the Covid-19 pandemic require the ability to rise up so that they can survive and adapt to crisis conditions. The individual's ability to survive, rise up and adapt to the current crisis conditions is called resilience Chukwuorji, John, and Ajero [4]. Resilience in health workers is needed in order to generate feelings of optimism and a positive attitude from each event experienced. Feelings of optimism and a positive attitude will make it easier for health workers to adapt during the pandemic and continue to carry out their duties in providing health services. Based on the description above, researchers are interested in conducting research to determine the resilience of nurses during the Covid-19 pandemic.

## METHOD

This study is a cross sectional study, which aims to describe the resilience of nurses during the Covid-19 pandemic. The research data collection was carried out using a questionnaire. A total of 117 respondents, taken by incidental sampling.

## RESULT AND DISCUSSION

The characteristics of respondents are grouped by age and resilience can be seen in the following table.

Distribution of characteristics of respondents for age and psychological resistance 2020  
(n = 117)

Characteristics	Mean	Median	SD	Min-Max	Percentage
Age	30.62	28.00	7.94	19-53	53%
Resilience	2.76	32.00	4.85	23-40	40%

Based on the table above, the average age of the respondents as a whole is 30.62 years. The youngest is 19 years old and the oldest is 53 years old. The media score for the age characteristics was 28.00 (SD = 7.94). Based on the median value for age characteristics, 53% of the maximum measured value of the respondents is above the median value.

The average value of resilience for nurses was 32.76. The median value for psychological resistance characteristics was 32.00 (SD = 4.85). Based on the median value for the characteristics of resilience, then 40% of the maximum measured value of respondents has resilience above the median (60% of respondents resilience <32 or sufficient resilience).

The relationship between age characteristics and resilience of nurses during the Covid-19 pandemic

Age is a variable that is often associated with a person's psychological developmental conditions. The results of this study obtained that the average age of nurses in Jember Regency is middle adults. Based on univariate analysis, it shows that the mean age of the respondents is 30.62 years with the youngest age being 19 years and the oldest being 53 years. The age range of 19-53 years is the middle adult age range, where in middle adult development the individual is no longer oriented to ego or self but more to the task that is his responsibility Puspanegara [9]

The changes that occur in middle adulthood are of course in line with the problems that have been faced and how the environment responds to each change. The results of the bivariate analysis test showed that there was no significant relationship between age characteristics and psychological resistance. Resilience is built from individual psychological abilities where each individual is different and is influenced by multidimensional aspects, not only age aspects but social life affects psychological resilience Shanafelt, et al [10]. Researchers argue that a person's age will have a significant correlation to psychological resistance if the individual is not psychologically depressed. The current condition is also in line with the results of the study which showed that there was no significant correlation between age and resilience.

The current conditions of the Covid-19 pandemic have caused many problems for the community, including nurses. Physical and psychological stress, increased risk of infection, fatigue, lack of interaction with family, discrimination and isolation of course make nurses face problems in carrying out their duties and daily life going forward even affecting the welfare of nurses. The characteristics of respondents are grouped based on length of work, and the institution where they work can be seen in the following table.

Distribution of respondent characteristics based on gender, length of work  
and work agency, 2020 (n = 117)

Characteristics	Frequency	Percentage
<b>Length of work</b>		
<1 year	29	24.8
> 1 year	88	75.2
<b>Working Agency</b>		
Health Center / Clinic	47	40.2
Hospital	70	59.8

Based on the above, it is known that most of the respondents are women (61.5%). According to the length of employment, most of the respondents had worked for more than 1 year (75.2%). According to the institutions where they work, most of the respondents work in hospital agencies (59.8%).

The results of the analysis of the relationship between the characteristics of the respondents based on age, gender, length of work and the institution where they work with psychological resistance, it is known that the p value of each characteristic is  $> 0.05$ , while the characteristics of the workplace institution are 0.01. The p value for the characteristics of the institution at work is  $< 0.05$ , which means that there is a relationship between the workplace agency and resilience.

The relationship between the old characteristics of working with the resilience of nurses during the Covid-19 pandemic The length of work for a nurse is also a variable that is often associated with their psychological health. Individuals who work longer hours often have less enthusiasm for achievement and improvement in work. Based on the univariate analysis, it shows that most of the length of work of nurses in this study was  $> 1$  year (75.2%). The results of the bivariate analysis between the characteristics of the length of work and resilience of nurses showed insignificant results (p value  $> 0.05$ ).

The length of work can be a reference for a nurse in solving problems when faced with crisis conditions, especially with regard to duties and responsibilities as a profession. Individuals will use methods according to their experiences in order to adapt to the changes that occur. The resilience of a nurse is formed from an adaptive attitude by making some positive efforts according to the experience they have so that they are able to carry out their next duties and occur Wagiu [12]. The longer an individual carries out his duties and obligations, the more adaptive the individual is assumed. Other research states that each individual has a different response to crisis conditions, depending on the experiences gained during past crisis conditions. Individuals who are new to work and facing crisis conditions at work will experience higher psychological pressure than individuals who have worked for a long time and have experience in dealing with crisis conditions.

The results of research related to the length of work of nurses illustrate that nurses who have worked longer periods of time are able to focus on how to solve the problems they face. Experience in dealing with crisis conditions will be very useful to help nurses determine adaptive attitudes and behaviors.

Researchers argue that the experience of nurses in facing crisis conditions such as the current Covid-19 pandemic varies, depending on the way nurses perceive the crisis condition. A nurse becomes more resilient or better psychological resilience when she has a positive perception of previous traumatic events, on the other hand, nurses are not resilient or their resilience decreases when they have negative perceptions and maladaptive coping mechanisms in carrying out their duties and responsibilities during the covid-19 pandemic. A maladaptive coping mechanism is coping that reduces independence, optimism and inhibits the integrity function of a nurse Stuart [11].

### **The relationship between the characteristics of the institution where they work and the resilience of nurses during the Covid-19 pandemic**

The results of the univariate analysis in this study showed that most of the nurses worked in hospital institutions (59.8%). The results of the bivariate analysis between the characteristics of the institution where they work and the resilience of nurses showed significant results (p value = 0.01).

Working as a nurse in a health center or hospital has both positive and negative impacts Zhang, J. Huipeng, Haiping, Shining, Qifeng, Tingyun and Baoguo [12]. The positive impacts obtained include fulfilling basic human needs including physiological needs, to self-actualization needs. The negative impacts that appear are very diverse, especially during the Covid-19 pandemic period, both physically including fatigue, work accidents, injuries and chemical contamination as well as the psychological effects that are often felt.

Researchers argue that nurses who work in hospitals have a greater workload than nurses who work in puskesmas. Nurses who work in hospitals are in a limited environment (small space), which allows them to be close to patients to be able to observe the patient's condition and evaluate nursing actions and medical actions taken so that the risk of health problems during the Covid-19 pandemic is higher. If the nurses working in the hospital are not ready for this condition, it can lead to a maladaptive coping mechanism. Maladaptive coping can reduce a person's resilience.

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## CONCLUSION

Resilience of nurses can be interpreted as an adaptive response from a nurse to stressors that come from a crisis. With the existence of resilience, it can be explained that each nurse has a different response to stressors. Nurses with less resilience will respond maladaptively to stressors or crisis conditions. On the other hand, there are also nurses who are facing the same crisis conditions but they do not show a maladaptive response, so this is where the difference in resilience of a nurse lies.

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